

housing holes **5x**, **5y**, **5z** and the external surface **10o** of the lamination **10** represent their shapes before the deformation. In FIG. **10**, the deformations are illustrated in an exaggerated manner, by approximately 100 times.

**[0050]** By contrast, in the method of manufacturing the laminated core **R** according to the embodiment, the sealing resin **9** is injected into the magnet housing holes **5x**, **5y** arranged at symmetric positions with respect to the line **VS** extending in the radial direction at the step (B), and the sealing resin is injected into the magnet housing hole **5z** that is a magnet housing hole other than the magnet housing holes **5x**, **5y** at the step (C). When the sealing resin is injected into the magnet housing holes at a plurality of steps, the sealing resin is injected into the magnet housing holes **5x**, **5y** arranged at symmetrical positions at one of the steps. In this manner, the injection load is applied symmetrically, at one of the steps, with respect to the line **VS** extending in the radial direction, so that the internal stress resultant of the injection load is balanced. In this manner, the deformation of the laminated core **R** resultant of the injection load can be reduced.

**[0051]** From the viewpoint of filling the scaling resin **9** in the desired magnet housing holes more reliably and easily, the following configuration is used. In other words, at the step (B), the lamination **10** is placed between the upper mold **40** and the lower mold **30** included in the mold **60** having the upper mold **40** with the resin pots **41**, and the lower mold **30**, and the sealing resin **9** is injected into pairs of magnet housing holes **5x**, **5y** via the resin flow paths **70x**, **70y** communicably connecting the pairs of magnet housing holes **5x**, **5y** to the resin pot **41**, and at the step (C), the lamination **10** is placed between the upper mold **40** and the lower mold **30**, and the resin is injected into the magnet housing holes **5z**, via the resin flow paths **70z** communicably connecting the resin pot **41** and the magnet housing holes **5z**. At the step (B) before the sealing resin **9** is injected, the cull plate **70a** provided with the resin flow paths **70x**, and the cull plate **70b** provided with the resin flow paths **70y** are placed between the lamination **10** and the upper mold **40** provided with the resin pots **41**. At the step (C), before the sealing resin **9** is injected, the cull plate **70c** provided with the resin flow paths **70z** is placed between the lamination **10** and the upper mold **40** provided with the resin pot **41**.

**[0052]** In the method of manufacturing the laminated core **R** according to the embodiment, each pair of magnet housing holes **5x**, **5y** is arranged at symmetric positions with respect to the line **VS** extending in the radial direction, in a manner passing through the center of the area of the corresponding pole, being at the center in the circumferential direction. In this manner, at one of the steps, the sealing resin **9** is injected into the pair of magnet housing holes **5x**, **5y** arranged symmetrically with respect to the line **VS** passing through the center in the circumferential direction. In this manner, the injection load of the sealing resin **9** applied to each pole can be balanced further.

**[0053]** The sealing resin can also be injected in such a manner that the internal stress is balanced even in a configuration in which the magnet housing holes are arranged in a manner described below. In other words, in the method of manufacturing the laminated core **R** according to the embodiment, each of the magnet housing holes **5z** is provided interposed between a pair of magnet housing holes **5x**, **5y** in the plan view. The magnet housing holes **5x**, **5y** extend in the radial direction of the lamination **10** in the plan view,

and each of the magnet housing holes **5z** is provided interposed between the corresponding pair of the magnet housing holes **5x**, **5y** in the circumferential direction, and extends in the circumferential direction of the lamination **10** in the plan view.

**[0054]** An embodiment of this disclosure is explained above, but this disclosure is not limited to the embodiment described above. For example, the shape of the magnet housing holes extending from the top surface to the bottom surface of the lamination is not limited to that according to embodiment described above. Specifically, as in a lamination **10X** illustrated in FIG. **11A** magnet housing holes **5o**, **5p** extending in the circumferential direction and interposed between the pair of magnet housing holes **5x**, **5y** extending in the radial direction may be provided. The magnet housing holes **5o**, **5p** are adjacent to each other in the radial direction. As in a lamination **10Y** illustrated in FIG. **11B**, magnet housing holes **5q**, **5r** extending in the circumferential direction and interposed between the pair of magnet housing holes **5x**, **5y** extending in the radial direction may be provided. The magnet housing holes **5q**, **5r** are adjacent to each other in the circumferential direction. As in a lamination **10Z** illustrated in FIG. **11C**, magnet housing holes **5s**, **5t** extending in the radial direction and interposed between the pair of magnet housing holes **5x**, **5y** extending in the radial direction may also be provided. Each of the magnet housing holes **5s** extends in the same direction with the corresponding magnet housing hole **5x**, and is adjacent to the magnet housing hole **5x**. Each of the magnet housing hole **5t** extends in the same direction as the corresponding magnet housing hole **5y**, and is adjacent to the magnet housing hole **5y**.

**[0055]** Explained above is an example in which the resin flow paths for communicably connecting the resin pots provided to the upper mold and the magnet housing holes are formed by placing the cull plates between the upper mold and lamination, but the embodiment is not limited thereto. For example, the resin pots and the plungers may be provided to the lower mold, and resin flow paths communicably connecting the resin pots provided to the lower mold, and the magnet housing holes may be formed by placing the cull plates between the lower mold and the lamination. In a configuration in which the lower mold has the lamination mounting plate and the lower mold plate, the lamination mounting plate serving as a conveying tray may also serve as a cull plate.

**[0056]** Explained above is an example in which the resin pots and the magnet housing holes are communicably connected by placing the cull plates including the resin flow paths between the mold and the lamination, but the embodiment is not limited thereto. The resin flow paths may be provided to the mold (the upper mold or the lower mold), and the resin flow paths may communicably connect the resin pots and the magnet housing holes. In other words, the upper mold may be provided with the resin pots and the plungers, and the resin pots and the magnet housing holes may be communicably connected by the resin flow paths provided to the upper mold. Alternatively, the lower mold may be provided with the resin pots and the plungers, and the resin pots and the magnet housing holes may be communicably connected by the resin flow paths provided to the lower mold. In this manner, use of the cull plates may be rendered unnecessary, when the communicable connection